

Randy DeCaminada James G. Cummings Trust PO Box 1138 Fort Bragg CA 95437 27 August 2004

Project No. P219 TO8

Letter Report
Groundwater Monitoring Conducted 13 August 2004
501 North Main Street
Fort Bragg CA
Case No. 1TMC387

Dear Mr. DeCaminada:

This letter report documents groundwater monitoring conducted 13 August 2004 at the subject property. Water levels were measured in all wells and samples were collected and analyzed from wells MW2 and MW4. The results of our work are summarized in the following:

- Table 1 provides an environmental chronology.
- Table 2 summarizes groundwater level and gradient data.
- Table 3 summarizes groundwater purging and sampling information. Purge water generated during the work was containerized in labeled drums and stored onsite.
- Table 4 summarizes groundwater analytical results from monitoring wells.
- Figure 1 provides a location map.
- Figure 2 shows exploration locations.
- Figure 3 shows groundwater levels and gradient information (13 August 2004).
- Attachment 1 contains the groundwater sampling forms.
- Attachment 2 contains the laboratory reports, chain-of-custody forms, and chromatograms for well MW2.

The 13 August 2004 monitoring revealed elevated concentrations of TPH-gasoline in MW2 and MW4. Please contact us with any questions or comments.

Sincerely,

STREAMBORN

Douglas W. Lovell, PE Geoenvironmental Engineer

Yough W Corel

cc: Dan Warner/North Coast Regional Water Quality Control Board, Santa Rosa CA Mike Mihos/Mike's Classic Car Care, Fort Bragg CA

Mail: PO Box 8330, Berkeley CA 94707-8330 Office: 900 Santa Fe Avenue, Albany CA 94706

Table 1 (Page 1 of 2)

Environmental Chronology

501 North Main Street Fort Bragg CA

Date	Performed By	Description
Circa 1940's	Unknown	• Thirteen underground tanks were installed at the property: eight 55-gallon tanks, 15,000-gallon tank, 400-gallon tank, 325-gallon tank, 28-gallon tank, and 24-gallon tank.
		Sump installed inside the garage at the property.
		Hydraulic lift installed inside the garage at the property.
Circa 1940's	Anderson	• The property was operated as a service station called "Anderson's Service Station".
to 1970's		• The eight 55-gallon underground tanks were used to store virgin motor oil.
		• The 15,000-gallon underground tank and 400-gallon underground tank were used to store leaded gasoline. For some period of time (dates unknown), the gasoline was supplied by Chevron.
		• The 325-gallon underground tank was used to store waste oil.
		• The 28-gallon underground tank and 24-gallon underground tank were used to store unknown fluids. The fact that these tanks are small in volume leads us to believe they stored fluids with a correspondingly small demand, such as kerosene and/or white gas (unleaded gasoline).
1970's	Unknown	• The service station was closed. Use of the tanks, hydraulic lift, and sump were discontinued.
23 April 1998	Foss Environmental Services	• The 325-gallon waste oil tank, 15,000-gallon gasoline tank, 325-gallon gasoline tank, one of the eight 55-gallon virgin motor oil tanks, and sump were triple-rinsed. Approximately 3,200-gallons of rinseate were transported to the Seaport Environmental facility (Redwood City CA) for disposal.
		• The 15,000-gallon underground gasoline tank was ventilated with a fan (this continued to 15 May 1998).
1 May 1998	Streamborn	• Soil samples were collected beneath each end of the 15,000-gallon underground gasoline tank via angled borings. The soil samples were analyzed for TPH-gasoline, BTEX, MTBE, and total lead.
19 - 22 May	Streamborn and	• The 15,000-gallon underground gasoline tank was backfilled with sand-cement slurry.
1998	Foss Environmental Services	• The remaining seven 55-gallon virgin motor oil tanks were triple-rinsed. Approximately 250-gallons of rinseate were transported to the Seaport Environmental facility (Redwood City CA) for disposal.
		• The 400-gallon gasoline tank, 325-gallon waste oil tank, and eight 55-gallon virgin motor oil tanks were excavated and removed. The piping associated with these tanks and the 15,000-gallon tank was excavated and removed.
		• The sump was removed.
		• The hydraulic lift, aboveground hydraulic fluid tank, and associated piping were removed.
		• The tanks, piping, and hydraulic lift were transported to Schnitzer Steel (Oakland CA) for recycling as scrap steel.
		• Containerized tank solids and sump debris were transported to Demenno Kerdoon (Los Angeles CA) for disposal.
		• Soil samples were collected from beneath the 400-gallon gasoline tank, 325-gallon waste oil tank, eight 55-gallon virgin motor oil tanks, sump, and hydraulic lift. Soil samples were collected from beneath the piping associated with the underground tanks. Soil samples were also collected from the stockpiles of excavated soil. As appropriate, soil samples were analyzed for TPH-motor oil, TPH-diesel, TPH-gasoline, BTEX, fuel oxygenates and other VOCs, semivolatile organic compounds, total lead, total chromium, total cadmium, total nickel, and total zinc.
		• The common excavation for the eight 55-gallon virgin motor oil tanks was backfilled with approximately 8 cubic yards of imported soil.
		• The excavation for the 400-gallon gasoline tank was backfilled with approximately 8 cubic yards of sand-cement slurry.
		• While excavating to remove the aforementioned tanks and piping, two sets of pipes were discovered immediately south of the 15,000-gallon gasoline tank. These pipes did not appear to be associated with any of the previously-identified tanks.
8 - 9 October 1998	Streamborn	• Seven Geoprobe borings were completed to investigate petroleum hydrocarbon releases. Soil and groundwater samples were collected in the borings. Selected soil samples were analyzed for TPH-motor oil, TPH-diesel, TPH-gasoline, BTEX, fuel oxygenates, volatile organic compounds, and semivolatile organic compounds, as appropriate. Groundwater samples were analyzed for TPH-motor oil, TPH-diesel, TPH-gasoline, BTEX, fuel oxygenates, volatile organic compounds, semivolatile organic compounds, dissolved lead, dissolved chromium, dissolved cadmium, dissolved nickel, and dissolved zinc, as appropriate.

Table 1 (Page 2 of 2)

Environmental Chronology

501 North Main Street Fort Bragg CA

Date	Performed By	Description
22 - 23 October	Streamborn and Foss Environmental	• The previously-unidentified sets of pipes were excavated, revealing two additional underground tanks that likely stored kerosene or unleaded gasoline (white gas).
1998	Services	• The 28-gallon tank, 24-gallon tank, and two sets of piping were removed. The tanks and associated piping were transported to Schnitzer Steel (Oakland CA) for recycling as scrap steel.
		• Soil samples were collected from beneath the 28-gallon tank, from beneath 24-gallon tank, and from the stockpiles of excavated soil. The soil samples were analyzed for TPH-motor oil, TPH-kerosene, TPH-diesel, TPH-gasoline, BTEX, and total lead.
		• The excavations for the 28-gallon tank and 24-gallon tank were backfilled with excavated soil.
		• The excavation for the 325-gallon waste oil tank was backfilled with excavated soil and 2 cubic yards of imported soil.
		• Concrete debris (from removal of the pump island and pavement) was transported to the Baxman Gravel Company (Fort Bragg CA) for crushing and recycling as aggregate.
		• Approximately 16 cubic yards of soil excavated during removal of the 400-gallon gasoline tank and eight virgin motor oil tanks was transported to Keller Canyon Landfill (Pittsburg CA) for disposal.
29 December 1998	Chico Drain Oil Service	• The drummed water and rinseate, generated during removal of the 28- and 24-gallon tanks, was transported to Oil Re-refining (Portland OR) for disposal.
30 December 1998	Foss Environmental Services	The drummed soil, generated during removal of the 28- and 24-gallon tanks, was transported to Chemical Waste Management (Kettleman City CA) for disposal.
13 -14 September 2000	Streamborn	• Five monitoring wells ranging in depth from 22 to 24 feet were installed (MW1 through MW5). Soil and groundwater samples were collected and analyzed for TPH-motor oil, TPH-diesel, TPH-gasoline, BTEX, fuel oxygenates, and volatile organic compounds. Water levels were measured in the monitoring wells.
13-14 December 2000	Streamborn	• Water levels were measured in and groundwater samples were collected from monitoring wells MW1 through MW5. Samples were analyzed for TPH-motor oil, TPH-diesel, TPH-gasoline, BTEX, fuel oxygenates, and volatile organic compounds.
		• Level survey performed for the wells.
7 March 2001	Streamborn	• Water levels were measured in and groundwater samples were collected from monitoring wells MW1 through MW5. Samples were analyzed for TPH-motor oil, TPH-diesel, TPH-gasoline, BTEX, fuel oxygenates, and volatile organic compounds.
		• Level survey was performed again and the original survey measurements were verified.
13 June 2001	Streamborn	• Water levels were measured in and groundwater samples were collected from monitoring wells MW1 through MW5. Samples were analyzed for TPH-motor oil, TPH-diesel, TPH-gasoline, BTEX, fuel oxygenates, and volatile organic compounds.
9 January 2002	Streamborn	• Water levels were measured in monitoring wells MW1 through MW5 and groundwater samples were collected from monitoring wells MW2, MW4, and MW5. Samples were analyzed for TPH-diesel, TPH-gasoline, BTEX, and fuel oxygenates.
23 February 2003	Streamborn	Water levels were measured in monitoring wells MW1 through MW5 and groundwater samples were collected from monitoring wells MW2 and MW4. Samples were analyzed for TPH-motor oil, TPH-kerosene, TPH-diesel, TPH-stoddard solvent, TPH-hydraulic oil, TPH-gasoline, BTEX, and fuel oxygenates.
26 August 2003	Streamborn	• Water levels were measured in monitoring wells MW1 through MW5 and groundwater samples were collected from monitoring wells MW2 and MW4. Samples were analyzed for TPH-motor oil, TPH-kerosene, TPH-diesel, TPH-stoddard solvent, TPH-hydraulic oil, TPH-gasoline, BTEX, and fuel oxygenates.
16 March 2004	Streamborn	• Water levels were measured in monitoring wells MW1 through MW5 and groundwater samples were collected from monitoring wells MW2 and MW4. Samples were analyzed for TPH-motor oil, TPH-kerosene, TPH-diesel, TPH-stoddard solvent, TPH-gasoline, BTEX, and fuel oxygenates.
13 August 2004	Streamborn	• Water levels were measured in monitoring wells MW1 through MW5 and groundwater samples were collected from monitoring wells MW2 and MW4. Samples were analyzed for TPH-motor oil, TPH-kerosene, TPH-diesel, TPH-stoddard solvent, TPH-gasoline, BTEX, and fuel oxygenates.

General Notes

- (a) TPH = total petroleum hydrocarbons.
- (b) BTEX = benzene, toluene, ethylbenzene, and xylenes.
- (c) MTBE = methyl tertiary butyl ether.
- (d) Streamborn = Streamborn (Berkeley CA)



(e) Fuel oxygenates analyzed by EPA Method 8260.

Table 2
Groundwater Level and Gradient Information

501 North Main Street Fort Bragg CA

Location	M	W1	MV	V2	MV	V3	MV	V4	MV	W5		
Ground Surface	Elev =	999.33	Elev = 9	999.26	Elev =	999.07	Elev = 9	998.84	Elev =	998.23	Groui	ndwater
Measuring Point		N Side, 998.97	TOC N Side, Elev = 998.83		TOC N Elev = 1	· ·	TOC N Side, Elev = 998.55		TOC N Side, Elev = 997.87		Gradient	
	Depth Elev Depth Elev Depth Elev		Elev	<u>Depth</u>	Elev	<u>Depth</u>	Elev					
Intercepted Interval	9 to 24	975.3 to 990.3	9 to 24	975.3 to 990.3	9 to 24	975.1 to 990.1	8 to 23	975.8 to 990.8	7 to 22	976.2 to 991.2	Direction	Magnitude
14 September 2000	15.29	983.68	14.27	984.56	14.92	983.84	15.12	983.43	14.30	983.57		
13 December 2000	15.17	983.80	14.34	984.49	14.98	983.78	15.17	983.38	14.36	983.51	N 64°W	0.009
7 March 2001	11.75	987.22	11.40	987.43	11.48	987.28	11.49	987.06	10.78	987.09	N 73°W	0.004
13 June 2001	13.82	985.15	13.04	985.79	13.54	985.22	13.67	984.88	12.90	984.97	N 77°W	0.007
9 January 2002	10.05	988.92	9.87	988.96	9.80	988.96	9.71	988.84	9.04	988.83	N 72°W	0.002
23 February 2003	11.25	987.72	10.98	987.85	11.0	987.76	10.99	987.56	10.29	987.58	N 79°W	0.003
26 August 2003	14.17	984.80	13.37	985.46	13.89	984.87	14.03	984.52	13.25	984.62	N 79°W	0.003
16 March 2004	11.69	987.28	11.34	987.49	11.42	987.34	11.43	987.12	10.71	987.16	N 79°W	0.004
13 August 2004	NM	NM	14.07	984.76	NM	NM	14.83	983.72	NM	NM	NM	NM
Total Depth (Last Measurement)	23.2		23.3		22.7		22.5		21.3			

General Notes

- (a) Measurements cited in units of feet. Elevations referenced to site-specific datum (not Mean Sea Level).
- (b) Measurements by Streamborn (Berkeley CA).
- (c) Depth of intercepted interval measured relative to the ground surface, and corresponds to the sand pack interval.
- (d) TOC = top of PVC casing. N = north. Measuring points are the top of PVC casing, north side.
- (e) Depth to water and total depth measured relative to the top of PVC casing.
- (f) Elevations are based on 13 December 2000 survey performed by Streamborn. Elevations relative to site-specific datum (Bench Mark No. 1 = northeast corner of step on loading dock for the property directly south across Pine Street [North Coast Brewing]. Assumed elevation = 1,000.00 feet).



Table 3 Groundwater Purging and Sampling Information 501 North Main Street Fort Bragg CA

Location	Sample Date	Sample Type	Dissolved Oxygen (mg/L)	рН	Specific Conductance (µS/cm)	Temperature (degrees C)	ORP (mV)	Turbidity and Color	Purge Method	Purge Duration (minutes)	Volume Purged (gallons)	Purged Dry ?	Standing Water Casing Volumes Removed
MW1	14 Sep 2000	Grab (bailer)	NM	7.0	NM	18.6	-230	Opaque, brown	Submersible pump	60	3	Yes	±3
	14 Dec 2000	Grab (bailer)	NM	8.0	870	15.1	-260	Opaque, brown	Submersible pump	25	12	Yes	±9
	7 Mar 2001	Grab (bailer)	2.1	7.4	470	15.6	-220	Cloudy, brown	Submersible pump	7	6	No	±3
	13 Jun 2001	Grab (bailer)	3.3	6.9	260	17.6	50	Translucent, brown	Submersible pump	9	5	Yes	±3
MW2	14 Sep 2000	Grab (bailer)	NM	6.6	NM	18.0	-220	Cloudy, Grey	Submersible pump	100	15	No	±10
	13 Dec 2000	Grab (bailer)	NM	7.2	870	18.1	-250	Cloudy, Grey	Submersible	7	10	No	±7
	7 Mar 2001	Grab (bailer)	1.7	7.4	700	15.4	-240	Cloudy, Grey	Submersible	8	6	No	±3
	13 Jun 2001	Grab (bailer)	1.5	7.1	560	16.7	-20	Clear, none	Submersible	6	5	No	±3
	9 Jan 2002	Grab (bailer)	2.0	7.1	510	16.4	-170	Clear, none	Submersible	10	7	No	±3
	23 Feb 2003	Grab (bailer)	1.9	7.6	660	16.4	-50	Translucent, brown	Submersible	10	6	No	±3
	26 Aug 2003	Grab (bailer)	1.9	6.7	620	19.5	-50	Clear, none	Submersible	10	5	No	±3
	16 Mar 2004	Grab (bailer)	1.5	7.4	430	17.0	-30	Clear, none	Submersible pump	10	6	No	±3
	13 Aug 2004	Grab (bailer)	1.4	6.5	510	18.5	-40	Turbid, brown	Submersible pump	5	5	No	±3
MW3	14 Sep 2000	Grab (bailer)	NM	7.0	NM	17.2	-180	Cloudy, brown	Submersible	17	15	No	±12
	13 Dec 2000	Grab (bailer)	NM	6.8	230	14.8	-180	Opaque, brown	Submersible	5	5	No	±5
	7 Mar 2001	Grab (bailer)	6.5	6.6	160	13.9	-170	Cloudy, brown	Submersible pump	6	6	No	±3
	13 Jun 2001	Grab (bailer)	7.4	6.5	170	15.6	80	Cloudy, brown	Submersible pump	17	10	No	±7
MW4	14 Sep 2000	Grab (bailer)	NM	6.8	NM	17.1	-240	Translucent, brown	Submersible pump	35	15	No	±12
	13 Dec 2000	Grab (bailer)	NM	7.2	510	15.1	-270	Clear, none	Submersible pump	7	5	No	±4
	7 Mar 2001	Grab (bailer)	2.2	7.0	570	14.0	-220	Clear, none	Submersible pump	7	6	No	±3
	13 Jun 2001	Grab (bailer)	1.7	6.7	710	19.5	-30	Clear, none	Submersible pump	6	5	No	±3
	9 Jan 2002	Grab (bailer)	1.9	7.0	520	16.2	-50	Clear, none	Submersible pump	10	6	No	±3
	23 Feb 2003	Grab (bailer)	1.1	7.0	510	16.3	-160	Clear, none	Submersible pump	10	6	No	±3
	26 Aug 2003	Grab (bailer)	1.4	6.4	590	18.6	80	Turbid, white	Submersible pump	15	4	No	±3
	16 Mar 2004	Grab (bailer)	1.3	6.9	670	17.0	90	Clear, none	Submersible pump	10	6	No	±3
	13 Aug 2004	Grab (bailer)	1.8	6.5	320	18.0	90	Cloudy, brown	Submersible pump	5	4	No	±3
MW5	14 Sep 2000	Grab (bailer)	1.0	6.5	NM	16.4	-160	Turbid, brown	Submersible pump	15	15	No	±13
	13 Dec 2000	Grab (bailer)	NM	6.4	160	17.3	-170	Cloudy, brown	Submersible pump	10	10	No	±9
	7 Mar 2001	Grab (bailer)	6.2	6.5	180	14.6	-160	Cloudy, brown	Submersible pump	7	5	No	±3
	13 Jun 2001	Grab (bailer)	6.2	6.4	200	17.4	0	Cloudy, brown	Submersible pump	8	4	No	±3
	9 Jan 2002	Grab (bailer)	6.5	6.3	190	15.8	-60	Turbid, brown	Submersible pump	10	6	No	±3

General Notes

- (a) Purging and sampling performed by Streamborn (Berkeley CA).
- (b) ORP = oxidation/reduction potential.
- (c) NM = not measured.
- $(d) \quad \text{Table entries correspond to end of purging (time of sampling)}.$

Table 4 (Page 1 of 2)
Groundwater Analytical Results from Monitoring Wells
501 North Main Street
Fort Bragg CA

Location	Sample Date	Sample Type	TPH- Motor Oil (µg/L)	TPH- Diesel (µg/L)	TPH- Kerosene (µg/L)	TPH- Stoddard Solvent (µg/L)	TPH- Hydraulic Oil (µg/L)	TPH- Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Volatile Organic Compounds (EPA Method 8260) (µg/L)	Fuel Oxygenates (EPA Method 8260) (µg/L)
MW1	14 Sep 2000	Grab	<710	93 (1)	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<0.5 to <50	<5 to <10
	14 Dec 2000	Grab	<580	<50	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	Chloroform = 1.3 Others <0.5 to <50	<5 to <10
	7 Mar 2001	Grab	<500	<50	NM	NM	NM	63	<0.5	<0.5	<0.5	<0.5	<0.5 to <50	<5 to <10
	13 Jun 2001	Grab	<500	<50	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<0.5 to <50	<5 to <10
MW2	14 Sep 2000	Grab	<500	1,400 (1)	NM	NM	NM	2,000	<0.5	<0.5	18	33	<2.0 to <200	<5 to <10
	13 Dec 2000	Grab	<500	210 (1)	NM	NM	NM	800 (1)	2.0	<0.5	<0.5	<0.5	<2.5 to <250	<5 to <10
	7 Mar 2001	Grab	<500	160 (1)	NM	NM	NM	1,300 (1)	<2.5	<2.5	<2.5	<2.5	Isopropyl benzene = 0.81 Others <0.5 to <50	<5 to <10
	13 Jun 2001	Grab	<500	240 (1)	NM	NM	NM	660 (1)	<0.5	<0.5	<0.5	<0.5	<0.5 to <50	<5 to <10
	9 Jan 2002	Grab	NM	160 (1)	NM	NM	NM	820 (1)	<0.5	<0.5	<0.5	<0.5	NM	<25 to <50
	23 Feb 2003	Grab	<500	170 (1)	<50	<50	<500	1,300 (1)	<0.5	<0.5	<0.5	<1.0	NM	<0.5 to <25
	26 Aug 2003	Grab	<500	<50	<50	190 (1)	<500	1,300 (1)	<2.5	<2.5	<2.5	<5.0	NM	<2.5 to <25
	16 Mar 2004	Grab	<500	<50	120 (1)	<50	NM	900 (1)	<0.5	<0.5	<0.5	<1.0	NM	<0.5 to <5
	13 Aug 2004	Grab	<500	190 (1)	<50	<50	<500	2,100 (1)	<0.5	<0.5	<0.5	<1.0	NM	<0.5 to <5
MW3	14 Sep 2000	Grab	<500	<50	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	Carbon Disulfide = 3.0 Chloroform = 1.5 Others <0.5 to <50	<5 to <10
	13 Dec 2000	Grab	<500	<50	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	Chloroform = 0.88 Others <0.5 to <50	<5 to <10
	7 Mar 2001	Grab	<500	<50	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	Chloroform = 0.86 Others <0.5 to <50	<5 to <10
	13 Jun 2001	Grab	<500	<50	NM	NM	NM	<50	<0.5	<0.5	< 0.5	<0.5	<0.5 to <50	<5 to <10



Table 4 (Page 2 of 2)
Groundwater Analytical Results from Monitoring Wells
501 North Main Street
Fort Bragg CA

Location	Sample Date	Sample Type	TPH- Motor Oil (μg/L)	TPH- Diesel (µg/L)	TPH- Kerosene (µg/L)	TPH- Stoddard Solvent (µg/L)	TPH- Hydraulic Oil (µg/L)	TPH- Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	Volatile Organic Compounds (EPA Method 8260) (µg/L)	Fuel Oxygenates (EPA Method 8260) (µg/L)
MW4	14 Sep 2000	Grab	<500	540 (1)	NM	NM	NM	1,700	<0.5	<0.5	<0.5	11	<2.0 to <200	<5 to <10
	13 Dec 2000	Grab	<500	120 (1)	NM	NM	NM	240	<0.5	2.0	1.2	4.1	<0.5 to <50	<5 to <10
	7 Mar 2001	Grab	<500	51 (1)	NM	NM	NM	210 (1)	<0.5	<0.5	<0.5	<0.5	<0.5 to <50	<5 to <10
	13 Jun 2001	Grab	<500	50 (1)	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<0.5 to <50	<5 to <10
	9 Jan 2002	Grab	NM	<50	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	NM	<5 to <10
	23 Feb 2003	Grab	<500	<50	<50	<50	<500	<50	< 0.5	<0.5	<0.5	<1.0	NM	<0.5 to <25
	26 Aug 2003	Grab	<500	<50	<50	<50	<500	57 (1)	<0.5	<0.5	<0.5	<1.0	NM	<0.5 to <5
	16 Mar 2004	Grab	<500	<50	<50	<50	NM	<50	<0.5	<0.5	<0.5	<1.0	NM	<0.5 to <5
	13 Aug 2004	Grab	<500	160 (1)	<50	<50	<500	1,100 (1)	<0.5	<0.5	0.95	<1.0	NM	<0.5 to <5
MW5	14 Sep 2000	Grab	<500	<50	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	Chloroform = 1.3 Others <0.5 to <50	<5 to <10
	13 Dec 2000	Grab	<500	<50	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	Chloroform = 0.85 Others <0.5 to <50	<5 to <10
	7 Mar 2001	Grab	<500	<50	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	Chloroform = 1.4 Others <0.5 to <50	<5 to <10
	13 Jun 2001	Grab	<500	<50	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	<0.5 to <50	<5 to <10
	9 Jan 2002	Grab	NM	<50	NM	NM	NM	<50	<0.5	<0.5	<0.5	<0.5	NM	<5 to <10

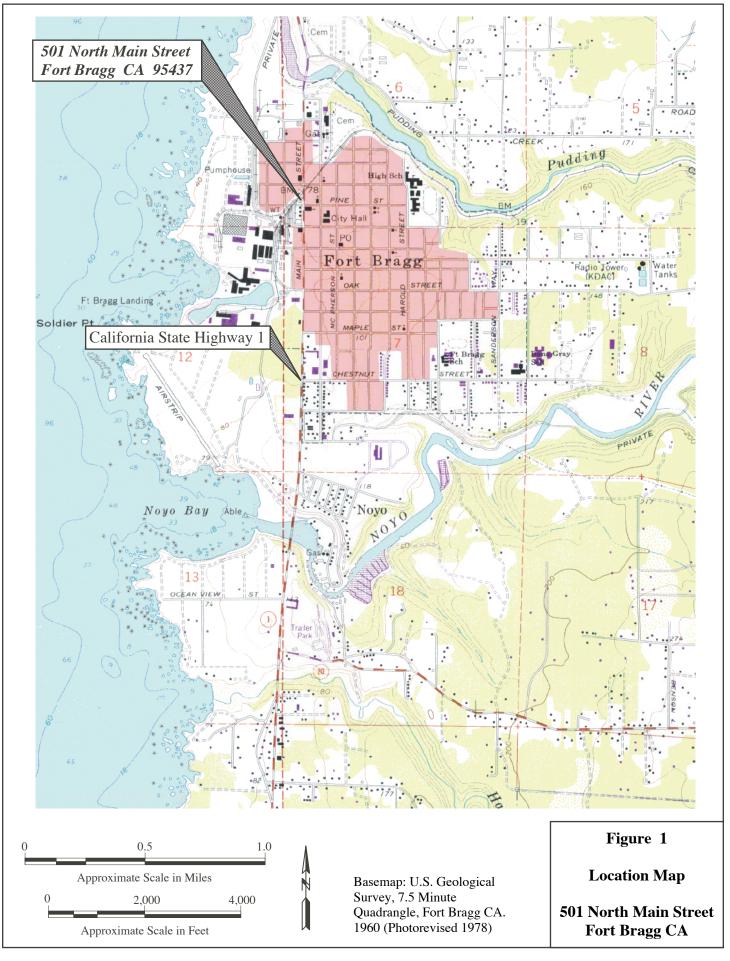
General Notes

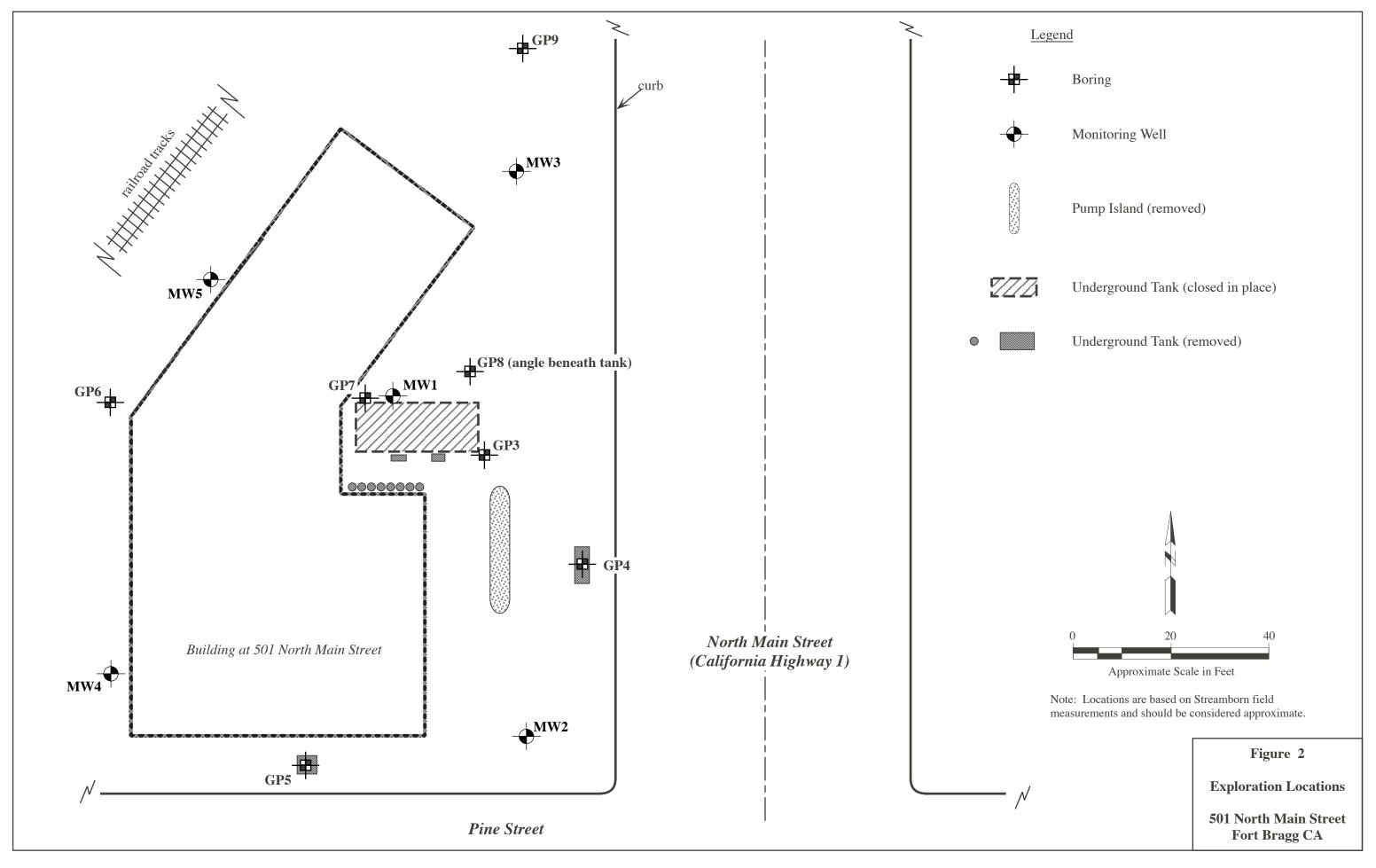
- (a) TPH = total petroleum hydrocarbons. NM = not measured.
- (b) Samples collected by Streamborn (Berkeley CA). Samples analyzed by Chromalab = STL Chromalab = STL San Francisco (Pleasanton CA).

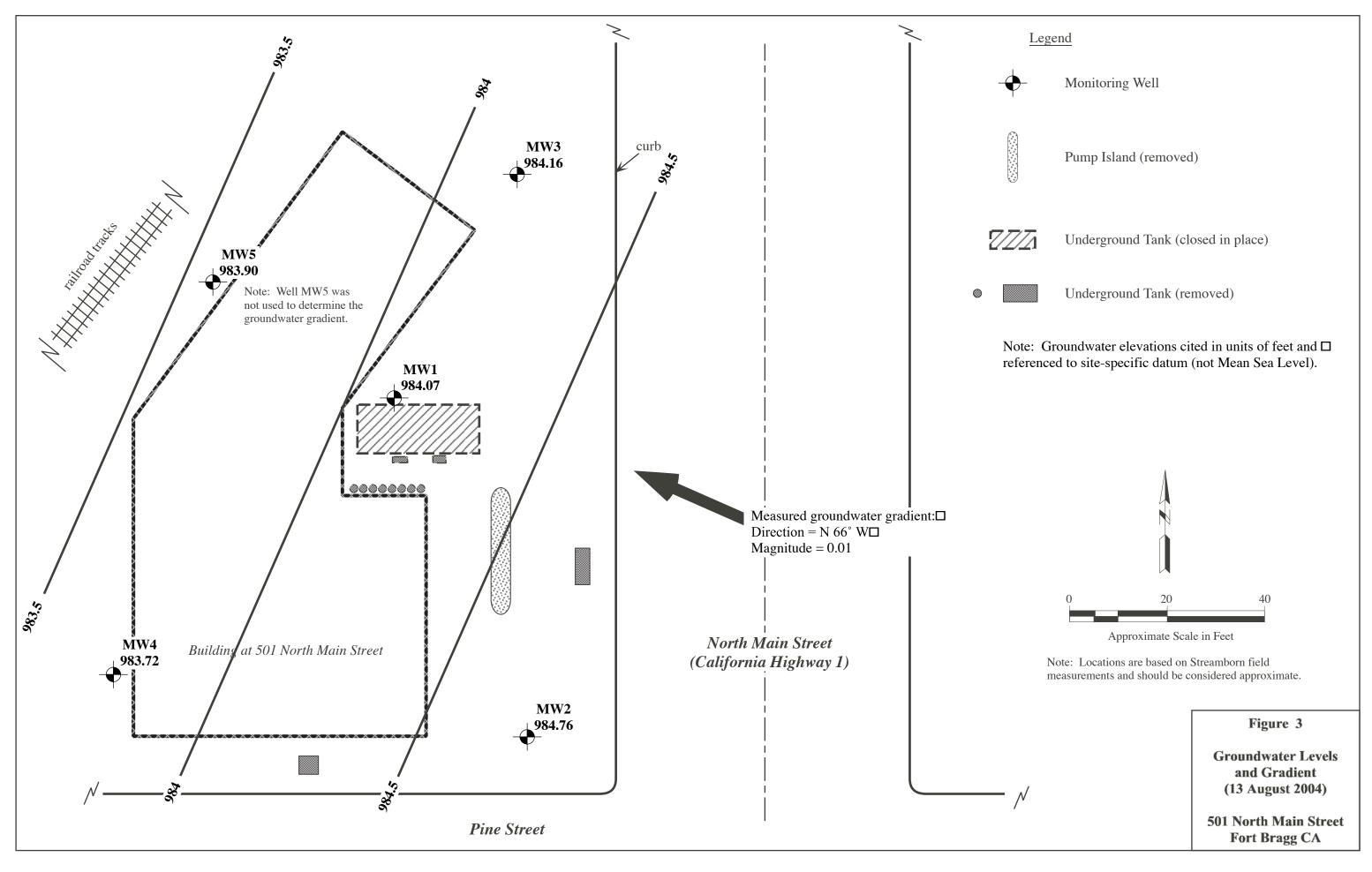
<u>Footnote</u>

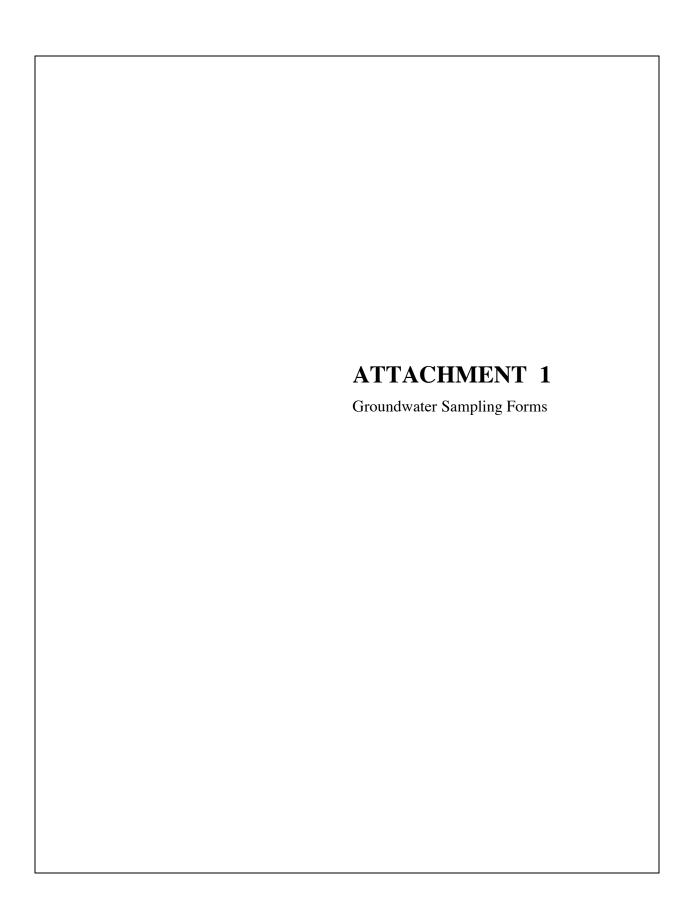
(1) The laboratory reported that the sample result did not match the standard.











MONITORING WELL PURGE DATA

Project Name/Number:	501 North Main Street / P219 TO8	Logged By:	Michael D. Chendorain
Property Location:	501 North Main Street, Fort Bragg CA	Date:	13 August 2004
Well Number:	MW4	Sample Type:	Grab
Purging Equipment:	Submersible pump	Depth to Water:	14.83 feet
Sampling Equipment:	Bailer with bottom-emptying device	Total Depth:	22.42 feet
Measuring Point:	Top of casing, north side	Odor:	None
Free Product:	None	Sample Number:	501-MW4 (13 Aug 04)
Comments:	None		

Note obstructions, well damage, or other compromising features under comments. Record depth in feet.

Total Depth (feet)	-	Depth to Water (feet)	x	0.04 gallons/foot for 1-inch well 0.16 gallons/foot for 2-inch well 0.65 gallons/foot for 4-inch well 1.47 gallons/foot for 6-inch well	=	Single Casing Volume (gallons)		Three Casing Volumes (gallons)
22.42	-	14.83	X	0.16	=	1.21	x 3	3.64

Purge Volume (gallons)	Time	Dissolved Oxygen (mg/L)	рН	Specific Conductivity (µS/cm)	Temp (°C)	ORP (mV)	Turbidity	Color	Purged Dry?	Comments
0	4:00	1.43	6.20	469	18.6	112.3	Translucent	Brown	No	Start purge
2.5	4:02	1.52	6.38	328	18.2	88.0	Cloudy	Brown	No	
4	4:04	1.83	6.45	324	18.1	88.3	Cloudy	Brown	No	Collect sample

Note observations of odor, sheen, and other signs of contamination under comments. Record turbidity as clear, turbid, cloudy, translucent, or opaque.

MONITORING WELL PURGE DATA

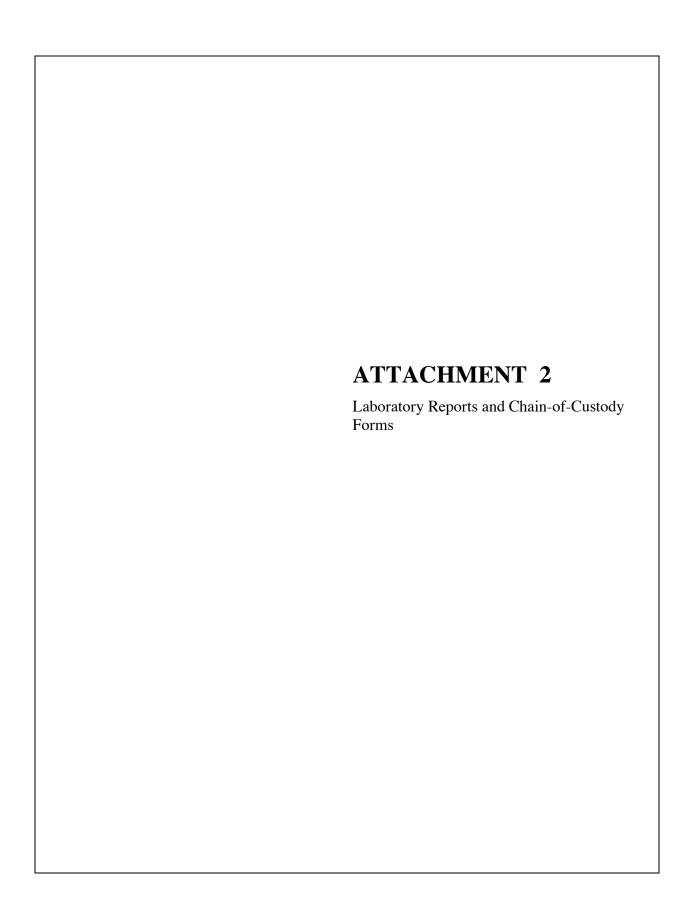
Project Name/Number: 5	501 North Main Street / P219 TO8	Logged By:	Michael D. Chendorain
Property Location: 5	501 North Main Street, Fort Bragg CA	Date:	13 August 2004
Well Number: N	MW2	Sample Type:	Grab
Purging Equipment: S	Submersible Pump	Depth to Water:	14.07 feet
Sampling Equipment: I	Bailer with bottom-emptying device	Total Depth:	23.13 feet
Measuring Point: T	Top of casing, north side	Odor:	None
Free Product: N	None	Sample Number:	501-MW2 (13 Aug 04)
Comments: N	None		

Note obstructions, well damage, or other compromising features under comments. Record depth in feet.

Total Depth (feet)	-	Depth to Water (feet)	x	0.04 gallons/foot for 1-inch well 0.16 gallons/foot for 2-inch well 0.65 gallons/foot for 4-inch well 1.47 gallons/foot for 6-inch well	=	Single Casing Volume (gallons)		Three Casing Volumes (gallons)
23.13	-	14.07	X	0.16	=	1.45	х 3	4.35

Purge Volume (gallons)	Time	Dissolved Oxygen (mg/L)	pН	Specific Conductivity (µS/cm)	Temp (°C)	ORP (mV)	Turbidity	Color	Purged Dry?	Comments
0	4:48	1.67	6.99	968	18.2	-8.7	Cloudy	White	No	Start purge
2	4:49	1.51	6.44	525	18.3	-29.6	Turbid	White	No	
4.5	4:51	1.36	6.48	507	18.5	-42.9	Turbid	White	No	Collect sample

Note observations of odor, sheen, and other signs of contamination under comments. Record turbidity as clear, turbid, cloudy, translucent, or opaque.





Streamborn Consulting Services

August 30, 2004

900 Sante Fe Avenue Albany, CA 94706

Attn.: Michael D. Chendorain

Project#: P219 T08

Project: 501 North Main

Site: 501 N. Main Street, Fort Bragg, CA

Attached is our report for your samples received on 08/16/2004 18:00

This report has been reviewed and approved for release. Reproduction of this report

is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 09/30/2004 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

You can also contact me via email. My email address is: dsharma@stl-inc.com

Sincerely,

Dimple Sharma

Project Manager

haema



Total Extractable Petroleum Hydrocarbons (TEPH)

Streamborn Consulting Services
Attn.: Michael D. Chendorain

900 Sante Fe Avenue Albany, CA 94706

Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P219 T08 Received: 08/16/2004 18:00

501 North Main

Site: 501 N. Main Street, Fort Bragg, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
501-MW4 (13 AUG 04)	08/13/2004 16:04	Water	1
501-MW2 (13 AUG 04)	08/13/2004 16:51	Water	3



Total Extractable Petroleum Hydrocarbons (TEPH)

Streamborn Consulting Services
Attn.: Michael D. Chendorain

900 Sante Fe Avenue Albany, CA 94706

Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P219 T08 Received: 08/16/2004 18:00

501 North Main

Site: 501 N. Main Street, Fort Bragg, CA

Prep(s): 3510/8015M Test(s): 8015M

 Sample ID:
 501-MW4 (13 AUG 04)
 Lab ID:
 2004-08-0430 - 1

 Sampled:
 08/13/2004 16:04
 Extracted:
 8/17/2004 07:45

 Matrix:
 Water
 QC Batch#:
 2004/08/17-03.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	160	50	ug/L	1.00	08/18/2004 18:10	edr
Motor Oil	ND	500	ug/L	1.00	08/18/2004 18:10	
Kerosene	ND	50	ug/L	1.00	08/18/2004 18:10	
Stoddard solvent	ND	50	ug/L	1.00	08/18/2004 18:10	
Hydraulic Oil	ND	500	ug/L	1.00	08/18/2004 18:10	
Surrogate(s)						
o-Terphenyl	77.9	60-130	%	1.00	08/18/2004 18:10	



Total Extractable Petroleum Hydrocarbons (TEPH)

Streamborn Consulting Services

Attn.: Michael D. Chendorain

900 Sante Fe Avenue Albany, CA 94706

Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P219 T08 Received: 08/16/2004 18:00

501 North Main

Site: 501 N. Main Street, Fort Bragg, CA

Prep(s): 3510/8015M Test(s): 8015M

 Sample ID:
 501-MW2 (13 AUG 04)
 Lab ID:
 2004-08-0430 - 3

 Sampled:
 08/13/2004 16:51
 Extracted:
 8/17/2004 07:45

Matrix: Water QC Batch#: 2004/08/17-03.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	190	50	ug/L	1.00	08/18/2004 18:38	edr
Motor Oil	ND	500	ug/L	1.00	08/18/2004 18:38	
Kerosene	ND	50	ug/L	1.00	08/18/2004 18:38	
Stoddard solvent	ND	50	ug/L	1.00	08/18/2004 18:38	
Hydraulic Oil	ND	500	ug/L	1.00	08/18/2004 18:38	
Surrogate(s)						
o-Terphenyl	75.6	60-130	%	1.00	08/18/2004 18:38	



Total Extractable Petroleum Hydrocarbons (TEPH)

Streamborn Consulting Services
Attn.: Michael D. Chendorain

900 Sante Fe Avenue Albany, CA 94706

Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P219 T08 Received: 08/16/2004 18:00

501 North Main

Site: 501 N. Main Street, Fort Bragg, CA

	Batch QC Report	
Prep(s): 3510/8015M Method Blank	Water	Test(s): 8015M QC Batch # 2004/08/17-03.10
MB: 2004/08/17-03.10-001		Date Extracted: 08/17/2004 07:45

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	08/17/2004 20:56	
Motor Oil	ND	500	ug/L	08/17/2004 20:56	
Kerosene	ND	50	ug/L	08/17/2004 20:56	
Stoddard solvent	ND	50	ug/L	08/17/2004 20:56	
Hydraulic Oil	ND	500	ug/L	08/17/2004 20:56	
Surrogates(s)					
o-Terphenyl	89.5	60-130	%	08/17/2004 20:56	



Total Extractable Petroleum Hydrocarbons (TEPH)

Streamborn Consulting Services
Attn.: Michael D. Chendorain

900 Sante Fe Avenue Albany, CA 94706

Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P219 T08 Received: 08/16/2004 18:00

501 North Main

Site: 501 N. Main Street, Fort Bragg, CA

Batch QC Report

Prep(s): 3510/8015M Test(s): 8015M

Laboratory Control Spike Water QC Batch # 2004/08/17-03.10

LCS 2004/08/17-03.10-002 Extracted: 08/17/2004 Analyzed: 08/17/2004 19:06 LCSD 2004/08/17-03.10-003 Extracted: 08/17/2004 Analyzed: 08/17/2004 19:06

Compound	Conc.	ug/L	Exp.Conc.	Recov	ery %	RPD	Ctrl.Lin	nits %	Fla	ags
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Diesel	678	691	1000	67.8	69.1	1.9	60-130	25		
Surrogates(s) o-Terphenyl	18.9	17.5	20.0	94.6	87.3		60-130	0		



Total Extractable Petroleum Hydrocarbons (TEPH)

Streamborn Consulting Services

Attn.: Michael D. Chendorain

900 Sante Fe Avenue Albany, CA 94706

Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P219 T08 Received: 08/16/2004 18:00

501 North Main

Site: 501 N. Main Street, Fort Bragg, CA

Legend and Notes

Result Flag

edr

Hydrocarbon reported is in the early Diesel range, and does not match our Diesel standard



Fuel Oxygenates by 8260B

Streamborn Consulting Services
Attn.: Michael D. Chendorain

900 Sante Fe Avenue Albany, CA 94706

Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P219 T08 Received: 08/16/2004 18:00

501 North Main

Site: 501 N. Main Street, Fort Bragg, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab#
501-MW4 (13 AUG 04)	08/13/2004 16:12	Water	2
501-MW2 (13 AUG 04)	08/13/2004 17:00	Water	4



Fuel Oxygenates by 8260B

Streamborn Consulting Services
Attn.: Michael D. Chendorain

501 North Main

900 Sante Fe Avenue Albany, CA 94706

Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P219 T08 Received: 08/16/2004 18:00

Site: 501 N. Main Street, Fort Bragg, CA

Prep(s): 5030B Test(s): 8260B

 Sample ID:
 501-MW4 (13 AUG 04)
 Lab ID:
 2004-08-0430 - 2

 Sampled:
 08/13/2004 16:12
 Extracted:
 8/25/2004 12:58

 Matrix:
 Water
 QC Batch#:
 2004/08/25-01.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	1100	50	ug/L	1.00	08/25/2004 12:58	g
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	08/25/2004 12:58	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	08/25/2004 12:58	
Di-isopropyl Ether (DIPE)	ND	1.0	ug/L	1.00	08/25/2004 12:58	
Ethyl tert-butyl ether (ETBE)	ND	0.50	ug/L	1.00	08/25/2004 12:58	
tert-Amyl methyl ether (TAME)	ND	0.50	ug/L	1.00	08/25/2004 12:58	
Benzene	ND	0.50	ug/L	1.00	08/25/2004 12:58	
Toluene	ND	0.50	ug/L	1.00	08/25/2004 12:58	
Ethylbenzene	0.95	0.50	ug/L	1.00	08/25/2004 12:58	
Total xylenes	ND	1.0	ug/L	1.00	08/25/2004 12:58	
Surrogate(s)						
1,2-Dichloroethane-d4	118.1	72-128	%	1.00	08/25/2004 12:58	
Toluene-d8	105.0	80-113	%	1.00	08/25/2004 12:58	



Fuel Oxygenates by 8260B

Streamborn Consulting Services
Attn.: Michael D. Chendorain

900 Sante Fe Avenue Albany, CA 94706

Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P219 T08 Received: 08/16/2004 18:00

501 North Main

Site: 501 N. Main Street, Fort Bragg, CA

Prep(s): 5030B Test(s): 8260B

 Sample ID:
 501-MW2 (13 AUG 04)
 Lab ID:
 2004-08-0430 - 4

 Sampled:
 08/13/2004 17:00
 Extracted:
 8/25/2004 13:20

 Matrix:
 Water
 QC Batch#:
 2004/08/25-01.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	2100	50	ug/L	1.00	08/25/2004 13:20	g
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	08/25/2004 13:20	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	08/25/2004 13:20	
Di-isopropyl Ether (DIPE)	ND	1.0	ug/L	1.00	08/25/2004 13:20	
Ethyl tert-butyl ether (ETBE)	ND	0.50	ug/L	1.00	08/25/2004 13:20	
tert-Amyl methyl ether (TAME)	ND	0.50	ug/L	1.00	08/25/2004 13:20	
Benzene	ND	0.50	ug/L	1.00	08/25/2004 13:20	
Toluene	ND	0.50	ug/L	1.00	08/25/2004 13:20	
Ethylbenzene	ND	0.50	ug/L	1.00	08/25/2004 13:20	
Total xylenes	ND	1.0	ug/L	1.00	08/25/2004 13:20	
Surrogate(s)						
1,2-Dichloroethane-d4	117.9	72-128	%	1.00	08/25/2004 13:20	
Toluene-d8	112.5	80-113	%	1.00	08/25/2004 13:20	



Fuel Oxygenates by 8260B

Streamborn Consulting Services
Attn.: Michael D. Chendorain

900 Sante Fe Avenue Albany, CA 94706

Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P219 T08 Received: 08/16/2004 18:00

501 North Main

Site: 501 N. Main Street, Fort Bragg, CA

	Batch QC Report	
Prep(s): 5030B Method Blank	Water	Test(s): 8260B QC Batch # 2004/08/25-01.64
MB: 2004/08/25-01.64-015		Date Extracted: 08/25/2004 07:15

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	08/25/2004 07:15	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	08/25/2004 07:15	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	08/25/2004 07:15	
Di-isopropyl Ether (DIPE)	ND	1.0	ug/L	08/25/2004 07:15	
Ethyl tert-butyl ether (ETBE)	ND	0.5	ug/L	08/25/2004 07:15	
tert-Amyl methyl ether (TAME)	ND	0.5	ug/L	08/25/2004 07:15	
Benzene	ND	0.5	ug/L	08/25/2004 07:15	
Toluene	ND	0.5	ug/L	08/25/2004 07:15	
Ethylbenzene	ND	0.5	ug/L	08/25/2004 07:15	
Total xylenes	ND	1.0	ug/L	08/25/2004 07:15	
Surrogates(s)					
1,2-Dichloroethane-d4	107.2	72-128	%	08/25/2004 07:15	
Toluene-d8	104.8	80-113	%	08/25/2004 07:15	



Fuel Oxygenates by 8260B

Streamborn Consulting Services
Attn.: Michael D. Chendorain

900 Sante Fe Avenue Albany, CA 94706

Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P219 T08 Received: 08/16/2004 18:00

501 North Main

Site: 501 N. Main Street, Fort Bragg, CA

Batch QC Report

Prep(s): 5030B Test(s): 8260B

 Laboratory Control Spike
 Water
 QC Batch # 2004/08/25-01.64

 LCS
 2004/08/25-01.64-054
 Extracted: 08/25/2004
 Analyzed: 08/25/2004 06:31

 LCSD
 2004/08/25-01.64-053
 Extracted: 08/25/2004
 Analyzed: 08/25/2004 06:53

Compound	Conc.	ug/L	Exp.Conc.	Recov	ery %	RPD	Ctrl.Lin	nits %	Fla	ıgs
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	27.3	27.2	25.0	109.2	108.8	0.4	65-165	20		
Benzene	26.3	24.5	25.0	105.2	98.0	7.1	69-129	20		
Toluene	29.3	27.5	25.0	117.2	110.0	6.3	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	499	511	500	99.8	102.2		72-128	0		
Toluene-d8	543	518	500	108.6	103.6		80-113	0		



Fuel Oxygenates by 8260B

Streamborn Consulting Services
Attn.: Michael D. Chendorain

900 Sante Fe Avenue Albany, CA 94706

Phone: (510) 528-4234 Fax: (510) 528-2613

Project: P219 T08 Received: 08/16/2004 18:00

501 North Main

Site: 501 N. Main Street, Fort Bragg, CA

Legend and Notes

Result Flag

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

2004-08-0430 Project Location: 501 N Main Street, Fort Bragg CA

Project Number: P219 TO8

Project Name: 501 North Main

Note: Sampler and Jahoffstory to observe preservative, condition, integrity, etc. of samples and resold (under "Comments") any exceptions from standard protocols. Relinquished By: Received By: Received By: Received By:	501-MW2 (13 Aug 04) 15-Aug-04		501-MW4 (13 Aug 04) 13-Aug-04	501-MW4 (13 Aug 04) 13-Aug-04			Sampler: Michael D. Chendorain
	0.000	177		377	Date		hael D.
Y ve press	5:00	15:h	4:12	4:04	Time		Chend
rvativ					Soil	Matrix	orain
e, cor	×	×	×	×	Water		
dition	34	и	×	и	Vapor Grab	108	-
inte	l ^		×	×	Composite	Type	
grity.	u	2	(H)	2	Quantity	1.50	1
ntegrity, etc. of samples	40 ml VOA	60	40 ml VOA	1 lite	Туре	Containers	Laboratory
and record (un	HCl/ice	ice	HCl/ice	ice	Preservative		Laboratory: STL San Francisco
der *Com	No.	No	No	No	Field Filtration		rancisco
A men					48-Hour	Ŧ	
(S)					5- Working Days	Turnaround	
y except	×	×	×	×	10-Working Days	banuc	
ious from standard [×		~	TPH-motor oil/ kerosene /dicsel /stoddard solvent/ hydraulic oil	A.	
protocols.	*		×		TPH-Gasoline/BTEX/ Fuel Oxygenates (by 8260)	Analyses	
							Labor
	Lab to supply Chromatograms with results	Lab to supply Chromatograms with results			Sampler		Laboratory Number:
Time: 770	4.0.6				Laboratory		

Report results to info@streamborn.com

CHROMATOGRAM REPORT

EPA Method 8260b fuoxy

Lab File ID: c:\saturnws\data\200408\082504\sa-wa-4-08-0430-004 8-25-2004 1;2 C:\SaturnWS\DATA\200405\051104\mb-wa-4-051101.64 5-11-2004

Acquisition Date:

8/25/2004 13:20

Calibration Date Range:

Date

7/2/2004 0:39 7/1/2004 18:40

EPA Sample No:

Approved_

sa-wa-4-08

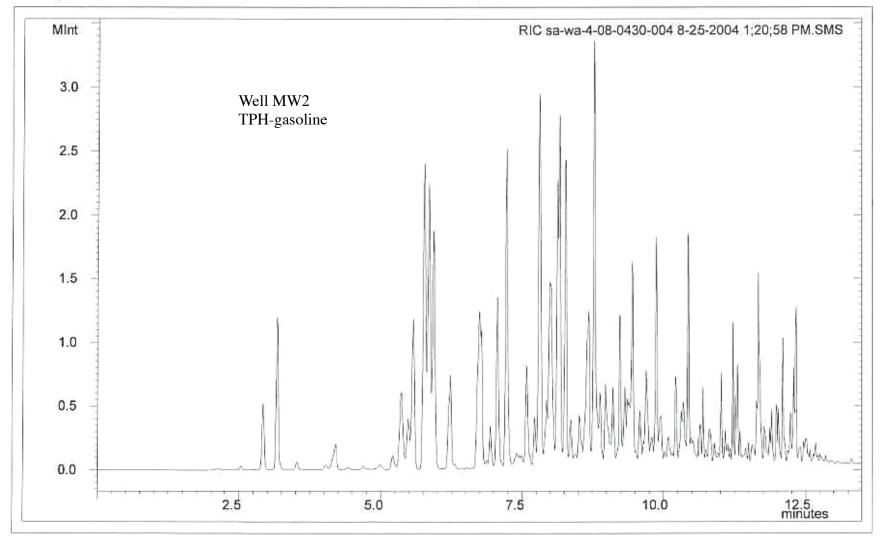
Operator:

Calibration File:

Lab Sample ID:

sa-wa-4-08-0430-004

Dilution: 1



TEPH Chromatogram

